CALIFORNIA
DEBT AND
INVESTMENT
ADVISORY
COMMISSION

AGENDA ITEM 4 (INFORMATION ITEM) FISCAL YEAR 2019-20 REPORT OF OPERATIONS

Fiscal Year 2019-20 Report of Operations June 17, 2020

DATA COLLECTION AND ANALYSIS UNIT

In compliance with its statutory requirements, CDIAC's Data Collection and Analysis Unit (Data Unit) maintains the California Debt Issuance Database (Database) which is considered the most comprehensive and accessible database of California public debt issuance in existence. The Database is the source for the debt statistics and analysis regularly released by CDIAC.

Data Collection

The Database, a large portion of which can be accessed on CDIAC's website, contains reports of proposed and issued debt, annual fiscal status reports for Mello-Roos and Marks-Roos debt and reports on draws on reserves and defaults for Mello-Roos and Marks-Roos issues.¹ The Database now contains reports for Annual Debt Transparency Report (ADTR) which became effective January 1st 2017. The report requires issuers to report annually on any debt whose issuance was reported to CDIAC on or after January 21, 2017 with the first reports due on January 31, 2018.² The Database contains information from 1984 to the present and is updated continuously by Data Unit staff. As of April 29, 2020, the Database contained more than 65,640 issuance records.

For fiscal year (FY) 2019-20, the Data Unit received and processed 11,482 reports including Reports of Proposed Debt Issuance (RPDIs),³ Reports

¹ The Data Unit receives annual fiscal status reports for Mello-Roos and Marks-Roos bonds issued after January 1, 1993 and January 1, 1996, respectively.

² Per Government Code Section 8855(k), added by SB 1029 (Chapter 307, Statutes of 2016) issuers required to submit an annual debt transparency report for Report of Final Sale submitted on or after January 21, 2017.

Per Government Code Section 8855(i) issuers of proposed new debt must give notice no later than 30 days prior to the sale date.

FIGURE 1
REPORTS PROCESSED, FY 2019-20* VERSUS FY 2018-19

TYPE OF REPORT	FY 2019-20	FY 2018-19	INCREASE/ DECREASE
Reports of Proposed Debt Issuance	1,932	2,853	-32.3%
Reports of Final Sale	1,839	2,797	-34.3%
Mello-Roos Yearly Fiscal Status Reports	1,445	1,459	-1.0%
Marks-Roos Yearly Fiscal Status Reports	2,415	2,451	-1.5%
Annual Debt Transparency Report	3,833	2,515	52.4%
Mello-Roos/Marks-Roos Draw on Reserve/Default/Replenishment Filings	18	6	200.0%
TOTAL REPORTS RECEIVED	11,482	12,081	-5.0%

^{*}Date range for FY 2019-20 is 7/1/2019 - 4/29/2020

of Final Sale (RFSs),⁴ Marks-Roos Local Bond Pooling Yearly Fiscal Status Reports (MKR YFSRs), Mello-Roos Community Facilities Districts Yearly Fiscal Status Reports (MLR YFSRs), and Mello-Roos/Marks-Roos Draw on Reserve/Default filings (DFDs) and the Annual Debt Transparency Report (ADTR), a 5% decrease over the total number of reports received in FY 2018-19. The number of total reports received in Figure 1 contains a breakdown of the reports processed by the Data Unit during fiscal year 2019-20.

With the implementation of CDIAC's regulatory package, effective on April 1, 2017, all reports, with the exception of the ADTR, must be filed using our online portal.⁵ During 2019-20, only seven reports were sent in hardcopy form requiring staff to manually enter the data.

Recognizing that the number of ADTRs required to be filed by issuers will essentially double on an annual basis, CDIAC began working with issuers in late 2017 to establish an alternative to filing individual reports through our online portal. We identified "volume filers", those issuers who would be required to submit 25 or more ADTRs on an annual basis. For the initial filing period, two of those issuers agreed to submit their data on an Excel spreadsheet. This data was then formatted by the State Treasurer's Office (STO) Information Technology Division (ITD) staff so it could be ingested into CDIAC's debt database. During 2019, CDIAC continued to work with ITD to create a "batch upload" process for volume filers that could be ingested without further formatting.

⁴ Per Government Code Section 8855(j), issuers are required to submit reports of final sale no later than 21 days after the sale of the debt.

⁵ Title 4, Division 9.6, Sections 6000-6062, effective April 1, 2017.

FIGURE 2
ADTR, METHODS OF SUBMITTAL, FY 2018-19 VERSUS FY 2019-20

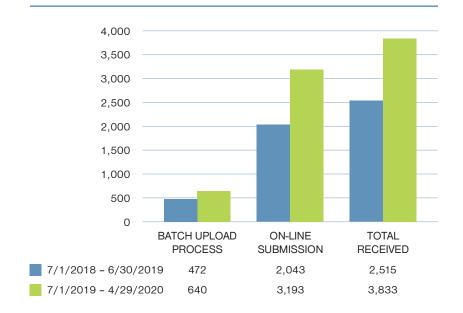


Figure 2 displays the number of ADTRs received and the methods used during the filing period ending FY 2018-19 and 2019-20.

Debt Issuance Fees

A critical function of the Data Unit is the collection of the issuance fees which are the source of CDIAC's operational funding.⁶ With the adoption of CDIAC's regulations, fee amounts are calculated based on principal amount of the issue times 2.5 basis points (0.0025%), not to exceed \$5,000, on all debt with a final maturity greater than 18 months. No fee is assessed for issues whose final length of maturity is 18 months or less. A detailed fee schedule is available on CDIAC's website.⁷

For FY 2019-20, the Data Unit sent out 1,053 invoices for a total of nearly \$3 million in fees. Figure 3 reflects the breakdown of fees assessed for state and local agencies.

Public Access to Debt Issuance Data

CDIAC uses a variety of online methods to provide public officials and members of the public immediate access to debt issuance data, including:

⁶ Government Code Section 8856. authorizes CDIAC to charge the lead underwriter, the purchaser or the lender a fee not to exceed one-fortieth of one percent of the principal amount of the issue not to exceed \$5,000 for any one issue.

yww.treasurer.ca.gov/cdiac/reporting.asp.

FIGURE 3
FEES ASSESSED, STATE AND LOCAL ISSUERS
JULY 1, 2019 TO APRIL 29, 2020

ISSUER	FEES ASSESSED	# OF INVOICES
STATE	\$231,748.41	56
LOCAL	\$2,752,200.80	997
TOTAL FEES ASSESSED	\$2,983,949.21	1,053

DEBTWATCH DATA PORTAL: ACCESS TO REPORTS AND ISSUANCE DOCUMENTS. DebtWatch⁸ provides citizens, the media, policy makers and others a new resource for understanding state and local government debt issuance. Containing easily accessible information relating to debt issued during the past thirty years, DebtWatch gives users the ability to compare, contrast, and analyze debt issuance data in unique, user-specific ways. DebtWatch provides data on both proposed and completed financial transactions and the ability to access the issuance documents that were submitted to CDIAC with the issuer's RFS. Documents vary depending upon the type of debt issued. Types of documents include official statements, bond specimens, indentures and resolutions of the governing body, promissory notes, leases, loan agreements, installment sales agreements, and other issuance-related disclosures.

In 2019, CDIAC worked with ITD to include an additional authorization field to the ADTR online submission form to accommodate bond issues that were sold under more than one authorization or statute. The additional authorization field was added in early 2020 and will be available for ADTR filers submitting reports for FY 2019-20.

DEBT LINE NEWSLETTER. CDIAC is required to publish a monthly newsletter describing the operations of the Commission during the prior month. CDIAC's monthly publication, *Debt Line*, includes a monthly calendar of issues which provides comprehensive information on all reports of proposed and finalized debt issuances received during the prior month.

ONLINE TABLES AND GRAPHS. CDIAC posts monthly and annual California state and local debt issuance data to its website in the form of summary tables and graphs which can be accessed through CDIAC's website. ¹⁰ Tables showing aggregate totals on the type, purpose and

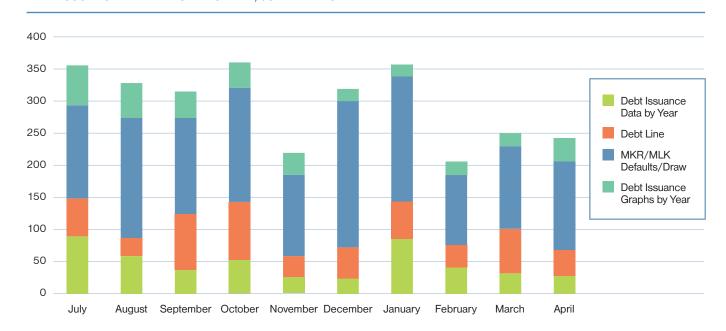
⁸ DebtWatch is located at: http://debtwatch.treasurer.ca.gov/.

⁹ Government Code Section 8855(h)(9).

¹⁰ Summary tables are available at: www.treasurer.ca.gov/cdiac/debtdata/debtdata.asp.

FIGURE 4A

DEBT ISSUANCE DATA WEBSITE ACTIVITY, JULY 2019 TO APRIL 2020



amount of debt issued and the amount refunded for the current and five prior calendar years is available on our website. Graphs showing a comparison of debt data for the current and prior calendar year by state and local agencies are also available on our website. The purpose and amount of proposed and completed transactions for the prior month is also posted.¹¹

MARKS-ROOS AND MELLO-ROOS DRAW ON RESERVES/DEFAULT RE-PORTS. Data on draws on reserve and defaults are posted as the reports are received. Reports are listed by issuer and date of occurrence.¹²

CDIAC recorded 2,922 hits to its website during FY 2019-20. Each "hit" or inquiry is recorded as well as the purpose for which the individual visited the site (Figure 4a). CDIAC recorded 11,423 hits to the DebtWatch website for FY 2019-20 (Figure 4b).

Reports

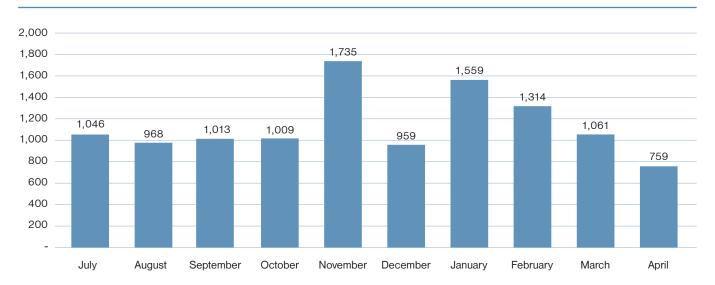
CDIAC publishes several summary reports annually, compiling data reported throughout the current calendar year and, in some cases, from past years.

¹¹ Graphs are available at: www.treasurer.ca.gov/cdiac/graphs/index.asp.

Mello-Roos/Marks-Roos Default and Draw on Reserve Reports are available at: www.treasurer.ca.gov/cdiac/default-draw/issuename.asp.

FIGURE 4B

DEBTWATCH WEBSITE ACTIVITY, JULY 2019 TO APRIL 2020



MARKS-ROOS LOCAL BOND POOLING ACT YEARLY FISCAL STATUS RE-PORT AND THE MELLO-ROOS COMMUNITY FACILITIES DISTRICT YEARLY FISCAL STATUS REPORT. The Marks-Roos and Mello-Roos Yearly Fiscal Status Reports received annually by CDIAC during the fiscal year (July 1 through June 30) are the basis for these reports. In an effort to bring The Marks-Roos Bond Pooling Act Participants Yearly Fiscal Status Report to a current status, the Data Unit has published reports for FY 2014-15 and staff is currently compiling and verifying data for the remaining intervening fiscal years and expects to post the remaining reports to the CDIAC website prior to the end of 2021.

The Mello-Roos Community Facilities District Yearly Fiscal Status Report, covering the period of July 1, 2017 through June 30, 2018 was published in 2019. The report for the July 1, 2018 through June 30, 2019 will be published by summer 2020. All prior year reports have been published.

CALENDAR OF PUBLIC DEBT ISSUANCE. This annual report provides details on each issuance of public debt in California. Each listing includes the issuer name, county, debt type, purpose of the issue, date of sale, debt principal amount, and whether or not the issue is a refunding. Each listing also shows the interest rate, rating, credit enhancement information, final maturity date, and major participants in the financings. The report is organized chronologically by issuer, beginning with the State of California and its departments and agencies, then local

Pursuant to Government Code Sections 6599.1(b) and 53359.5(b) issuers of Mark-Roos (after January 1, 1996) and Mello-Roos (after January 1, 1993) bonds must submit Yearly Fiscal Status Reports to CDIAC.

agencies (further sorted by county, agencies within counties, and by the sale date of the issue) and student loan corporations. The 2018 calendar was published in June 2019. We expect the 2019 calendar to be published in summer 2020.

SUMMARY OF CALIFORNIA PUBLIC DEBT ISSUANCE. This annual report provides aggregate summary information by issuer on major components of debt, such as long-term and short-term debt, tax-exempt and taxable debt, and refunding existing indebtedness. The tables included in the report contain statistics on both state and local agencies broken out by type of issuer, type of debt, purpose of financing, federal taxability, and whether the issue is a refunding or not. The 2018 summary tables were published in June 2019. We expect the 2019 calendar to be published in spring 2020.

ANNUAL REPORT. CDIAC's Annual Report provides more global analyses of public debt issued in California for the calendar year. The report includes comparisons of prior year's debt issuance including by type and purpose. Analysis on other characteristics of the debt and a report of CDIAC's operations are also included in this report. The 2019 report is expected to be published in spring 2020.

Other Data Unit Projects and Initiatives

DEBT AUTHORIZED BUT UNISSUED. SB 1029 (Hertzberg, Chapter 307, Statutes of 2016), added the requirement for issuers to report annually on any debt whose issuance was reported to CDIAC on or after January 21, 2017. CDIAC developed the ADTR to assist issuers in satisfying the new reporting requirement and to provide consistency in data received. Due to the nature of the data required by the SB 1029, especially the requirement to report on the amount of debt authorized and unissued, staff determined that reporting on authorization should begin with the submittal of the RPDI. This data could then be verified when the RFS was submitted and would then be pre-populated on the ADTR. In order to ensure that the authorization was correctly tracked, an "authority" table had to be established in the database so that multiple issues could be linked to one issuance authorization and thereby calculate the amount of authorization available at the beginning of reporting period, added during the reporting period and remaining at the end of the reporting period. Also, since some issues are sold using more than one issuance authorization, the ability to associate two authorizations to one issue was needed. Working with ITD, Data Unit staff developed the criteria for the authority table and determined what updates needed to be made to the online reporting forms, the database and the ADTR. These updates were completed in October 2018 and the new RPDI, RFS and ADTR were made available for use. Building upon the changes in October 2018, Data Unit staff worked with ITD in 2019 to add a second authorization field to the ADTR which is currently available for issuers to use during the FY 2019-20 reporting period.

ADTR BATCH UPLOAD PROCESS. As mentioned earlier in this report, CDIAC realized that the number of ADTRs that would be submitted would essentially double each reporting period and identified several large issuers who submit a large volume of reports each year. Data Unit staff reached out to several volume issuers and requested that they submit their ADTR data using an excel spreadsheet. Two issuers responded. When the spreadsheets were received, CDIAC staff worked with ITD to format the data so that it could be ingested into the database. Since each of the spreadsheets had the data organized in a different way, ITD staff had to first organize the data and then determine how to prepare it for ingestion. Going through this process provided ITD with a roadmap of what process needed to be established for a "batch upload" that could be used by all issuers, would be user friendly, capture each year's data, and be readily ingestible. Working with the Data Unit, ITD developed a single "batch upload" process. Unit staff identified a list of volume filers, those issuers who would be filing 25 or more ADTRs and offered them the ability to test the process to see if it would suit their needs. As of the end of 2019, two issuers submitted their ADTR data via the batch upload.

ELECTRONIC DOCUMENT STORAGE. The goal to reduce the amount of archived materials stored both on site and in the States warehouses by systematically reviewing, digitizing, and electronically storing all paper documents in an electronic document storage facility (FileNet) continued during 2019. Staff began digitization in 2009 with calendar year 2008 documents. To date, all 2001 through 2018 documents have been scanned and electronically stored. We are currently scanning files from 2000. Our success with this project is largely due to a process initiated by ITD staff in June 2017. The process automatically transfers the scanned document files from a temporary file folder into FileNet with minimal action required by Data Unit staff.

2020 Outlook

SYSTEM AND PROCESS IMPROVEMENTS. CDIAC staff will work to develop a new online report filing system to accept RPDIs, RFSs, ADTRs, MKR YFSRs, MLR YFSRs, and DFDs that will allow users to be able to save their reports, make edits, and easily save their reports in PDF format.

CDIAC ELECTRONIC DOCUMENT STORAGE. CDIAC staff will complete the digitization project to cover years 2000 through present. Our goal is to upload documents from the year 2000 to complete this process to update the DebtWatch site.

STREAMLINING ANNUAL DEBT REPORTING. CDIAC staff continue to work with ITD and our stakeholders to streamline the submittal of the ADTR for our volume filers.

EDUCATION AND OUTREACH UNIT

Government Code Section 8855(h)(7) requires CDIAC to provide a continuing education program to municipal debt and investment professionals.

SEMINAR ENROLLMENT. In FY 2019-20, 1014 municipal professionals attended educational events offered by CDIAC or in partnership with other public finance organizations, almost equaling the attendance reported for FY 2018-19 (Figure 5). Multiple webinar offerings FY 2015-16 drew high numbers of attendees, causing a positive outlier in the attendance figures. During FY 2019-20 CDIAC conducted six webinars in addition to the three core seminars, two topical seminars, and one co-sponsored seminar.

CDIAC continues to serve its core constituency, local public agencies, through its educational programs. In FY 2019-20, approximately 60% of the attendees of CDIAC's educational programs were representatives of cities, counties, special districts, schools and other local government entities. An additional 17.5% of attendees were affiliated with State government (Figure 6).

Webinars remain an effective mode of delivering CDIAC's educational information as 59% of attendance at CDIAC's education programs was attributed to the six webinars broadcast during the fiscal year.

CDIAC Education Programs Offered in FY 2019-20

WEBINARS

GREEN BONDS IN THE GOLDEN STATE: A PRACTICAL PATH FOR ISSUERS WEBINAR SERIES. This three-part webinar series, held on August $14^{\rm th}$, September $18^{\rm th}$, and October $2^{\rm nd}$, addressed the growing market demand for investment opportunities that advance environmental and so-

FIGURE 5
SEMINARS, CONFERENCES, WORKSHOPS AND WEBINARS ATTENDANCE
FYS 2015-16 THROUGH 2019-20

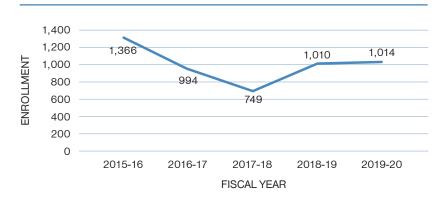
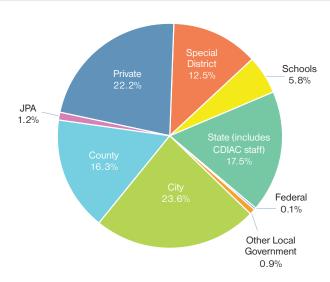


FIGURE 6
ENROLLMENT AT CDIAC EDUCATIONAL PROGRAMS BY AGENCY TYPE
FY 2019-20



cially responsible goals. Increasingly aware of the growing market, elected leaders and their constituents across the country have begun to demand policy that matches the climate friendly attributes of infrastructure projects with complementary financing structures. Resultantly, green bonds have emerged in the past few years as a viable financing strategy for issuers investing in low-carbon and environmentally friendly infrastructure. This series was designed to provide public finance officials with the practical guidance needed to meet the green financing demands of their constituency. This program was structured to provide participants with a clearer understanding of the risks and benefits of a green bond issuance and information to strike the proper balance between financial and environmental stewardship.

SB 1029 - YEAR 3 OF THE ANNUAL DEBT TRANSPARENCY REPORT (ADTR). This webinar, held on November 6, 2019, discussed the insights gained from the first two years of ADTR filings and provided helpful information for both first-year and returning filers. This webinar addressed the questions most frequently asked by issuers and offered tips for the successful completion and submittal of the report.

SOCIALLY RESPONSIBLE INVESTING: INTEGRATION IN THE LOCAL AGENCY PORTFOLIO. The board members and constituents of local agencies are increasingly asking that the investment of public funds take into account socially responsible investing (SRI) objectives. SRI and environmental, social, and governance (ESG) considerations may affect a local agency's investment policy, credit analysis and investment portfolio decision process. Based on CDIAC's publication *Socially Responsible Investing*

– What Does It Mean and What's the Risk?, this webinar, held on December 10, 2019, was designed to give participants a better understanding of fundamental SRI and ESG concepts, an opportunity to hear how other California local agencies are integrating SRI objectives and ESG criteria, and learn about available resources that can help with SRI analysis.

NAVIGATING INVESTOR DISCLOSURES DURING THE COVID-19 CRISIS. With a COVID-induced recession looming, investors are eager for information regarding the financial position of municipal issuers. At minimum, they expect issuers to uphold their continuing disclosure agreements and material event notifications, and to accurately describe their financial situation in initial offering documents. But, how does an issuer provide accurate information regarding its financial condition when circumstances are unprecedented and dynamic? Should issuers make voluntary disclosures to the market? Is there greater risk in disclosing nothing or disclosing what you know in the midst of economic uncertainty? This webinar held on May 1, 2020, presented a discussion of the disclosure challenges faced by issuers, to provide participants strategies on how to navigate this very challenging dilemma.

CORE SEMINARS

In FY 2019-20, CDIAC hosted three core educational programs.

ONGOING DEBT ADMINISTRATION. This seminar, held on September 4, 2019, was designed to provide government officers with the knowledge needed to manage their responsibilities for continuing disclosure, postissuance filing and reporting, and compliance with federal arbitrage rules. Complying with both national and state-level reporting was discussed. This seminar differs from CDIAC's bond accountability and transparency program as this curriculum focused on the larger practices of living with an issue over the life of the bond.

MUNICIPAL MARKET DISCLOSURE. This seminar, held on March 3, 2020, was designed to help local agencies improve market transparency through better disclosure and staff training. The program focused on the SEC rules and regulations, in addition to California-specific CDIAC reports, for primary and secondary disclosure practices by public agencies.

CDIAC AND THE CALIFORNIA MUNICIPAL TREASURERS' ASSOCIATION (CMTA) – ADVANCED PUBLIC FUNDS INVESTING. This interactive seminar, held on January 23-24, 2020, provided an advanced discussion of portfolio management, including the more complex concepts underlying sound public portfolio analysis and decision-making. The seminar covered assessing and adjusting liquidity, understanding risk, advanced analytics, and advanced investment analysis concepts. It also included an investment portfolio case-study simulation to allow seminar participants to place concepts into practice.

TOPICAL SEMINARS

In FY 2019-20, CDIAC hosted two topical educational programs.

DEVELOPING AND ADMINISTERING INTERNAL CONTROLS FOR BOND ACCOUNTABILITY. This seminar, held on September 5, 2019, addressed a framework for developing and administering an internal control system to account for and report on the expenditure of bond proceeds. The seminar focused on the principles of a control system to provide for the prudent management and disbursement of public funds and applies these to bond administration. The program incorporated tools developed by the Task Force on Bond Accountability convened by the State Treasurer's Office.

PUBLIC FUNDS INVESTING WORKSHOP. This small group workshop, repeated over three days on November 18-20, 2019, allowed participants to engage in interactive learning to further their understanding of key investment terms and concepts. Participants used Excel on their own laptops to explore concepts such as the relationship between yield, duration and convexity. The workshop included an exercise on benchmarking and provided participants with Excel spreadsheets to utilize in managing their own investment portfolios.

Co-Sponsored Seminars

In FY 2019-20, in addition to the core seminar produced in partnership with CMTA, one of CDIAC's trainings was delivered collaboratively through partnership with *The Bond Buyer*.

THE BOND BUYER PRE-CONFERENCE. On September 23, 2019, CDIAC hosted a pre-conference, Administering Disclosure Obligations Under Amended SEC Rule 15c2-12, at The Bond Buyer's 29th Annual California Public Finance Conference. The event marked the 18th consecutive year that CDIAC has partnered with The Bond Buyer for the pre-conference. Amendments to Securities and Exchange Commission (SEC) Rule 15c2-12, which became effective February 27, 2019, added two new events that issuers of public debt must disclose to investors and other market participants. These two events, while defined in the context of the Rule, manifest themselves in countless forms within different public agencies. As a result, the obligation of issuers, underwriters, and legal counsel to identify, assess, and report disclosable events is more nuanced and, thus, more complex than the other event disclosures required under Rule 15c2-12. This program addressed the policy, legal, administrative, and transactional implications of Rule 15c2-12, as amended.

Support of the State Treasurer's Office (STO) Divisions, Boards, Authorities and Commissions (BCAs)

During FY 2019-20, staff in the Education Unit provided assistance to several BCAs within the STO. Using CDIAC's webinar portal and staff expertise, more than 500 stakeholders were trained or informed through the broadcasting of five webinars, with one additional webinar planned before the end of the current fiscal year. The agencies assisted, the number of webinars and the number of stakeholders who have already participated are shown in Figure 7.

FIGURE 7 STO SUPPORT, FY 2019-20

AGENCY	# OF WEBINARS	TOTAL PARTICIPANTS
California School Finance Authority (CSFA)	2	124
California Health Facilities Financing Authority (CHFFA)	2	83
California Achieving a Better Life Experience Act Board (CalABLE)	2	293
TOTALS	6	500

RESEARCH UNIT

California Government Code Section 8855(h)(5) authorizes CDIAC to undertake research projects that improve practices or reduce the borrowing costs of public issuers in California. Since the Commission's last meeting on June 13, 2019, CDIAC staff have either initiated or completed the following research assignments.

Completed Projects

CALIFORNIA DEBT FINANCING GUIDE (GUIDE) INTERACTIVE APPLICATION DEVELOPMENT. After the publication of the Guide, CDIAC contracted for the development of the Guide into an interactive application (App). This App was developed with WordPress can be downloaded on a personal device (phone, tablet, laptop), making the Guide more accessible. CDIAC is currently working to finalize the hosting arrangement of the App.

K-14 VOTER APPROVED GENERAL OBLIGATION BONDS: AUTHORIZED, BUT UNISSUED – 2020 UPDATE. CDIAC updated earlier research that cross-referenced K-14 general obligation bond issuance with the underlying voter approved authority to determine the amount of general obligation bonds that were authorized, but unissued since 2002. This update added election and issuance activity for calendar year 2019 to the original data.

LOCAL AGENCY INVESTMENT GUIDELINES: UPDATE FOR 2020. CDIAC, working collaboratively with industry contacts, reviewed and updated the CDIAC *Local Agency Investment Guidelines*. This document provides references and recommendations (developed by public and private sector professionals) for interpreting and applying California statute to common public fund investment topics related to local agencies. The 2020 update reflected statutory changes effective January 1, 2020.

RESULTS OF THE 2019 LOCAL ELECTIONS: BOND AND TAX MEASURES APPEARING ON THE 2019 LOCAL BALLOTS. This report provides a detailed analysis of the certified results of local bond and tax elections held in 2019. Also included in this report are detailed listings of each bond and tax measure by county, region, type of tax or debt, and purpose.

SOCIALLY RESPONSIBLE INVESTING. CDIAC provided an overview of socially responsible investing (SRI) objectives and environmental, social, and governance (ESG) criteria within the context of the statutory requirements for the investment of public funds. The brief includes examples of SRI policies currently implemented by local agencies, provides guidance and identifies available resources and data tools for incorporating SRI strategies into an investment policy

Initiated Projects

ALTERNATIVES TO ADVANCED REFUNDINGS. CDIAC will look at refunding activity since implementation of the Tax Cuts and Jobs Act of 2017, when municipal issuers lost the ability to advance refund tax-exempt financings. This review will identify the structures public issuers can use to achieve similar outcomes to advance refundings and will analyze refunding activity reported CDIAC.

CLIMATE CHANGE RISK DISCLOSURE. CDIAC will review Official Statements for Public Enterprise Revenue Bonds to assess public agency disclosure practices related to climate change. The purpose of the study was to learn what, if any, climate change risks were disclosed by public agencies accessing the municipal market. If public agencies were disclosing these risks, to the extent were they disclosing any potential impact of climate change on agency owned facilities, agency operations, and/or agency repayment ability.

CONVEXITY AND OPTION ADJUSTED SPREAD. CDIAC will review the public fund investment concepts of convexity and option adjusted spread.

MARKS-ROOS REPORTING: 20-YEAR REVIEW OF MARKS-ROOS ANNUAL REPORTING TO CDIAC. CDIAC will review twenty years of Yearly Fiscal Status Reports filed by issuers and obligors of Marks-Roos financings with CDIAC covering Fiscal Years 1996-97 through 2016-17. This re-

view will identify trends in Marks-Roos issuance, highlighting market or legislative changes in Marks-Roos issuance practices.

RESULTS OF THE 2020 PRIMARY ELECTION: BOND AND TAX MEASURES APPEARING ON THE 2020 PRIMARY BALLOTS, MARCH 3, 2020. This biannual report will provide an analysis of the certified results of the bond and tax elections held in the March 2018 Primary Election as well as a detailed listing of each bond and tax measure by county, region, type of tax or debt, and purpose.

REVIEW OF LOCAL CANNABIS TAX MEASURES. A subset of CDIAC's popular series on the *Results of Bond and Tax Measures appearing on Local Ballots*, CDIAC will focus on reviewing the local bond and tax measures that apply to cannabis since the passage of Proposition 215 (Medicinal Marijuana). CDIAC will compare the different taxing strategies approved by voters throughout the state.

UPDATE TO THE CALIFORNIA PUBLIC FUND INVESTMENT PRIMER. A Needs Assessment will be conducted on the current Investment Primer to determine the scope of any future updates.

Ongoing Activity

OUTREACH AND COLLABORATION WITH PUBLIC FINANCE ORGANIZATIONS. CDIAC continues to work with public finance organizations, public agencies and research organizations to identify and assess new forms of public debt and investments coming into the market. This collaboration helps to keep CDIAC informed of market trends and emerging products and practices to produce research that is timely and relevant.

DEBT AND INVESTMENT LEGISLATION AFFECTING STATE AND LOCAL GOVERNMENTS. CDIAC monitors the status and maintains an inventory of important state and federal legislation affecting public finance, municipal bond issuance, and public funds investing. Published periodically in Debt Line during the legislative session, the online inventory includes helpful links to the most current information on pending legislation.

DEBT LINE. CDIAC will continue to publish Debt Line, a monthly newsletter including issuance statistics and analysis, research articles penned by CDIAC staff, important dates and details arising from MSRB and SEC regulatory activities, and announcements of educational programming produced by CDIAC and allied organizations.

EDUCATION PROGRAM SUPPORT. The Research Unit will provide support to the Education Unit in their 2019-20 and 2020-21 programs.

TECHNICAL ASSISTANCE. The Research Unit will continue to provide input to local agencies and the general public on matters related to technical assistance request.

Proposed Projects and Activities

DISCLOSURE PRIMER. CDIAC will develop a concept to create a primer on municipal market disclosure. It is envisioned this primer would be a companion to the *California Debt Issuance Primer* and provide a detailed desk-reference for public finance officials on disclosure requirements and best practices.